

REMARKS

The present Amendment amends claims 1-13. Therefore, the present application has pending claims 1-13.

Claims 1-13 stand rejected under 35 USC §102(e) as being anticipated by Ramasubramani (U.S. Patent No. 6,509,589). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1-13 are not taught or suggested by Ramasubramani whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims so as to clarify that the present invention is directed to an information providing method on a communication network including a server for providing a service, a gateway apparatus and mobile packet communication network accommodating a mobile terminal and including a service management node for managing management information of the service to be provided to the mobile terminal in the mobile packet communication network such that the gateway apparatus is capable of communicating with the mobile terminal, the server and the service management node. The present invention is also directed to the features of the gateway apparatus.

According to the present invention the method includes making a request to set management information from the service management node to the gateway apparatus, in an execution process of a procedure for accommodating the mobile terminal to the mobile packet communication network, registering management information including a service identifier to

the server to be provided to the mobile terminal into a management table by the gateway apparatus in response to reception of the request, checking whether a service request has been issued to the server with respect to the service corresponding to the service identifier by the gateway apparatus and generating the service request and sending the service request to the server if the service request has not been issued by the gateway apparatus to the server to start the service.

Thus, by use of the features of the present invention as recited in the claims even if a mobile terminal has not issued a service request to a server for providing a service, a gateway apparatus can automatically generate the service request on behalf of the mobile terminal during a procedure such as location registration for accommodating the mobile terminal to a mobile communication network, and send the request to the server on behalf of the mobile terminal. Thus, according to the present invention it becomes possible to provide push-type information service to a mobile terminal without requiring a functional change to the mobile terminal to incorporate therein push-type functionality. These features of the present invention are described, for example, on pages 41 and 42 of the present application.

The above described features of the present invention now more clearly recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, the above described features of the present invention as now more clearly recited in the claims are not taught or suggested by Ramasubramani whether taken individually or in combination with any of the other of record.

Ramasubramani proposes a multi-network gateway connectable a plurality of different type of wireless carrier networks to the internet. As described with reference to FIG.3 of Ramasubramani, the multi-network gateway includes a push agent (module) 302 and a pull agent (module) 304 between an HTTP module 306 for communicating with the Internet and a wireless carrier interface 398 coupled to various type of wireless carrier networks each accommodating wireless communication devices (mobile terminals). In order to support the various carrier networks, each of the push agent 302 and the pull agent 04 includes airlinks for each of the carrier networks. These airlinks are specialized programming resources that are designed to correspond and interact with the particular wireless network characteristics associated with the corresponding carrier network.

As stated in Col.7, lines 6-10 of Ramasubramani, the push agent 302 operates to "push" information content from the Internet to the wireless communication devices and the pull agent 304 operates to "pull" information content from the Internet when requested by the wireless terminals.

Ramasubramani describes, in the last paragraph of co1.13 by referring to FIG.9, that a request (for information from the Internet) sent from a wireless device 922 can be forwarded to the carrier network in a wireless manner, the request then forwarded to a protocol adapter 912 of a NB-router via SMSC 918, and the protocol adapter 912 forwards the request to a port of the pull agent 904 where a airlink 930 is waiting to receive such request. The appropriate port associated with the airlink 930 is identified by using a port table 916.

Although the Examiner states in the Office Action referring to FIG.2 of Ramasubramani, that a carrier network (CN) 208 corresponds to a service management node of the invention, Applicants fail to find an element corresponding to the service management node in the drawings as alleged by the Examiner. Ramasubramani apparently fails to detail the operation performed between the multi-network gateway and the service management node as would be necessary for Ramasubramani to correspond to the features of the present invention as recited in the claims.

Further, Ramasubramani describes the flow diagram of push agent with reference to FIG. 11, but he fails to describe how to request a push server to start information distribution to a user having a target address (subscriber identifier) as would be necessary for Ramasubramani to correspond to the features of the present invention as recited in the claims.

As such, Ramasubramani fails to teach the features of the present invention as recited in the claims and the idea of automatic issuing a service request for service from the Internet, in place of a wireless communication device, by a gateway for connecting a mobile packet communication network (wireless carrier network) and the Internet, when the wireless communication device is connected to the mobile packet communication network.

Thus, Ramasubramani fails to teach or suggest making a request to set management information from the service management node to the gateway apparatus, in an execution process of a procedure for accommodating the mobile terminal the mobile packet communication network as recited in the claims.

Further, Ramasubramani fails to teach or suggest registering management information including a service identifier of the service to be provided to the mobile terminal into a management table by the gateway apparatus in response to reception of the request as recited in the claims.

Still further, Ramasubramani fails to teach or suggest checking whether a service request has been issued to the server with respect to the service corresponding to the service identifier by the gateway apparatus as recited in the claims.

Even further still, Ramasubramani fails to teach or suggest generating the service request and sending the service request to the server, if the service request has not been issued by the gateway apparatus to the server to start the service as recited in the claims.

Therefore, Ramasubramani fails to teach or suggest to the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 USC §102(e) rejection of claims 1-13 as being anticipated by Ramasubramani is respectfully requested.

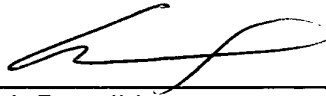
The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claims 1-13.

In view of the foregoing amendments and remarks, applicants submit that claims 1-13 are in condition for allowance. Accordingly, early allowance of claims 1-13 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (520.39903X00).

Respectfully submitted,

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